

New Edition of Reference Manual on Scientific Evidence

October 5, 2011 by [Sean Wajert](#)

The National Research Council and Federal Judicial center last week released the new edition of the [Reference Manual on Scientific Evidence](#). Readers of *MassTortDefense* know about this manual as a guide for judges searching for effective and fair ways to handle science-based issues, including assessing expert testimony. The Supreme Court has made clear that the law imposes on trial judges the duty, with respect to scientific evidence, to become evidentiary gatekeepers. The judge, without interfering with the jury's role as trier of fact, must determine whether purported scientific evidence is "reliable" and will "assist the trier of fact," thereby keeping from juries testimony that lacks the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.

The manual is intended to assist judges in managing cases involving complex scientific and technical evidence by describing the basic tenets of key scientific fields from which legal evidence is typically derived and providing examples of cases in which that evidence has been used. As the introduction to the new edition notes, the search is not a search for scientific precision. Courts cannot hope to investigate all the subtleties that characterize good scientific work. A judge is not a scientist, and a courtroom is not a scientific laboratory. But the objective is to seek legal decisions that fall within the boundaries of scientifically sound knowledge.

The Manual includes general chapters such as on "The Admissibility of Expert Testimony" and "How Science Works," and specific chapters on (of interest to our readers) Exposure Science, Epidemiology, and Toxicology, and new chapters on Neuroscience, and Mental Health Evidence. The authors note the new edition has a focus on two critical topics that judges frequently confront, causation and expert bias.

The new edition was produced by a committee of distinguished judges, scientific experts, attorneys and academics.